

## Level 1 Validation Certificate

This document verifies that the Level 1 Validation process was completed. The session details and audit review outcomes are included here.

This certificate is required for submission – alongside the Level 1 validated water audit software file – to the California Department of Water Resources.

Call Date: 9/18/2019

Water Supplier			Validator	
Supplier Name:	Moulton Niguel Water District		Validator:	Kate Gasner, Water Systems Optimization
Supplier Participants:	Johnathan Cruz Lindsey Stuvick Doug Zytkewicz James Glover Ty Coston Dan West Ronin Goodall Rhonda Himley		Validator Qualifications:	Water Audit Validator Certificate from the AWWA California Nevada Section
Key Audit Metrics			Certification Statement b	y Validator
Data Validity Score:	81		This water loss audit report has been Level 1 validated per the requirements of California Code of Regulations Title 23, Division 2, Chapter 7 and the California Water Code Section 10608.34.	
ILI:	1.1		All recommendations on volume derivation and Data Validity Grades	
Real Loss:	24.4	gal / conn / day	were incorporated into the water audit.	
Apparent Loss:	5.3	gal / conn / day		
Non-Revenue Water as Percent of Cost of Operating System:	3.0%	·		

## Level 1 Validation – Water Supplier Confirmation

This document confirms participation in and endorsement of the Level 1 Validation as completed.

This acknowledgement is required for submission – alongside your Level 1 validated water audit software file – to the California Department of Water Resources.

Water Supplier Name:	Moulton Niguel Water District
Water Supplier Public Water System ID:	3010073
Water Audit Period:	Fiscal Year 2018/19

## Water Audit & Water Loss Improvement Steps

Steps taken in the audit period timeframe to increase data source accuracy, reduce real losses, and/or reduce apparent losses, as informed by the water audit.

Moulton Niguel Water District (District) deployed a new water loss and leak tracking tool, the ESRI ArcGIS Online Survey123 application. Survey123 allows field technicians to input water loss data using smart phones while in the field and drop a pin at the exact location to map all leaks within the service area and identify potential "hot spots." The District began utilizing a new technique to meter the actual volume of water loss in service lines with a modified portable meter to increase volume accuracy. In FY18-19, new leak detection equipment was purchased which was recommended and field tested by a global leader in on-site water leak detection during a week-long training class hosted by the District. Random, representative small meter testing was performed, as well as GIS verification of service connections. Over 5000 AMI radios were installed in the service area to provide near real-time consumption data and leak alerts.

## Certification Statement by Water Supplier Executive:

This water loss audit report meets the requirements of California Code of Regulations Title 23, Division 2, Chapter 7 and the California Water Code Section 10608.34 and has been prepared in accordance with the method adopted by the American Water Works Association, as contained in their manual, *Water Audits and Loss Control Programs, Manual M36, Fourth Edition* and in the Free Water Audit Software version 5.

Executive Name (print):	Drew Atwater		
Executive Position:	Director of Finance and Water Resources		
Signature:	En An		
Date	09/23/19		